

**COSTS OF SUPPORTING AND MODERNIZING CURRENT
U.S. MILITARY FORCES**

Briefing Summary

September 1988

**The Congress of the United States
Congressional Budget Office**

This paper summarizes a briefing prepared by the Congressional Budget Office at the request of Senator Pete Domenici, Ranking Minority Member of the Senate Budget Committee. Questions about the analysis should be addressed to Jack Mayer or Frances Lussier (226-2900) of CBO's National Security Division.

At the request of Senator Domenici, the Congressional Budget Office (CBO) recently estimated future defense costs. The results of this analysis were presented to Senator Domenici in a briefing. This paper summarizes the results of the analysis and the assumptions underlying it. It also incorporates minor revisions of the figures used in the briefing.

According to CBO's analysis, supporting and modernizing current numbers of U.S. military forces over the next five years could require average real growth in the defense budget of between 1 percent and 4 percent a year (see Figures 1 and 2). This estimate assumes that the current number of forces are maintained and that they are modernized with weapons currently in development or production--that is, no weapons programs are canceled nor are any new programs proposed beyond those now in development. (Table 1 provides selected details on what constitutes current forces and lists some currently planned major weapons programs.) This range of average annual real growth would also provide sufficient money to sustain the current tempo of day-to-day military training and operations, which should avoid declines in the readiness of military forces.

The higher (4 percent) level of annual budget growth would be needed to support increases in day-to-day operating costs consistent with the projected 1989 relationship between the value of major weapons and operating expenditures (see Figure 1). The higher level of growth would also allow new weapons to be bought at the relatively fast pace envisioned in the currently available plans of the Reagan Administration. Some of these plans were proposed in January 1987.

Early this year the Administration announced plans to slow the growth in defense spending. The Administration is currently revising its weapons plans to conform to lower budgets and will presumably slow the pace of modernization, which will postpone some defense expenditures. Details of these slowdowns are not yet publicly available, but for the sake of illustration CBO has assumed that the pace of several programs is slowed (see Table 2 for details). It is also possible that operating costs of weapons will be determined mostly by the numbers of weapons and combat units, which are not increasing much, rather than by the total value of weapons. If the pace of modernization is slowed and there is little growth in operating costs, the costs of modernizing current forces would increase by about 1 percent more than inflation each year for the next five years (see Figure 2). Other combinations of assumptions yield results that lie between annual growth of 1 percent and 4 percent (see Figures 1 and 2).

The Congressional Budget Office also analyzed the cost of supporting and modernizing current numbers of forces through the end of this century. To provide necessary funds, annual real growth in the defense budget would have to average between 1 percent and 2 percent (see Figures 1 and 2). The range reflects the differences in assumptions just discussed.

Regardless of which assumptions prove valid, electing to modernize current numbers of military forces with all of the weapons now in planning or production requires real growth in defense budgets, because these weapons are quite expensive. For example, the new stealth strategic bomber (the B-2 aircraft) may cost about \$60 billion for 132 aircraft.^{1/} New Nimitz-class aircraft carriers needed to replace aging carriers each cost about \$3 billion. The Army anticipates spending about \$30 billion on a new attack helicopter (designated the LHX). These new weapons are only a few examples of the many that are currently planned.

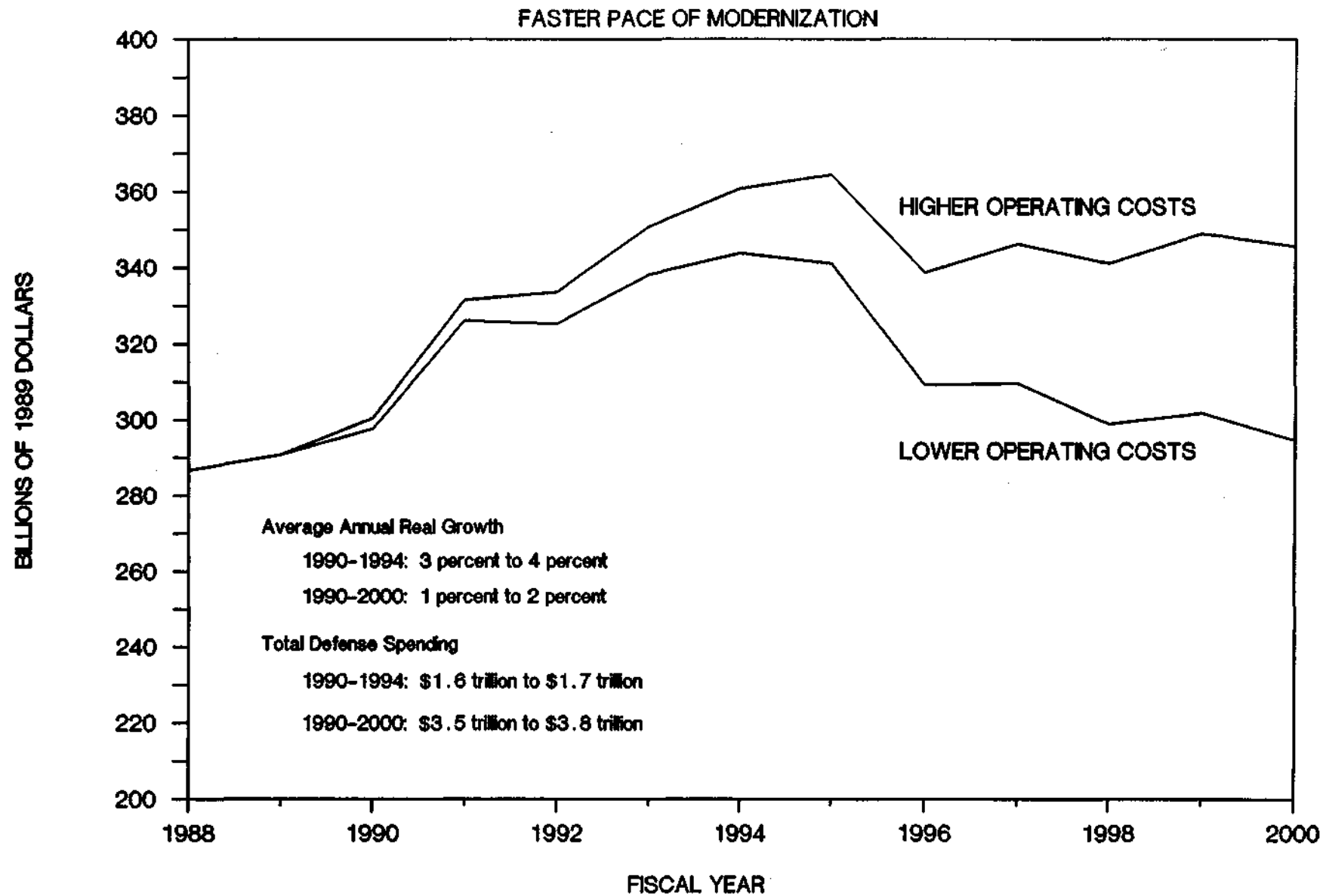
Many assumptions underlie these projections of annual growth, and changes in assumptions would alter projections. For example, the wide variation in day-to-day operating costs of different weapons makes these costs difficult to estimate. The range of results discussed above suggests this uncertainty but may not capture it fully. In addition, the costs of procuring major weapons are based on current Administration estimates; historically, actual costs have often been higher. Procurement costs for smaller items (for example, trucks, missiles, and satellites) cannot be readily estimated since detailed procurement plans are not publicly available. Costs for these smaller items therefore are assumed to maintain their historical relationship with the cost of total weapons procurement--an assumption that has proved reasonably accurate over the last 10 years. Similarly, no data are publicly available to allow detailed projections of costs for research and development or military construction. These costs are assumed to maintain their historical share of the total defense budget--another assumption that has proved reasonably accurate in light of the history of the defense budget. The many assumptions suggest that these projections should only be used as rough approximations of the eventual costs of supporting and modernizing the current numbers of forces.

Moreover, growth in defense costs is not inevitable. The growth rates discussed above assume that the Administration and the Congress choose to support current numbers of forces and to modernize them with all the new weapons now in planning and

1. Congressional Budget Office, Modernizing U.S. Strategic Forces (November 1987), p. 64.

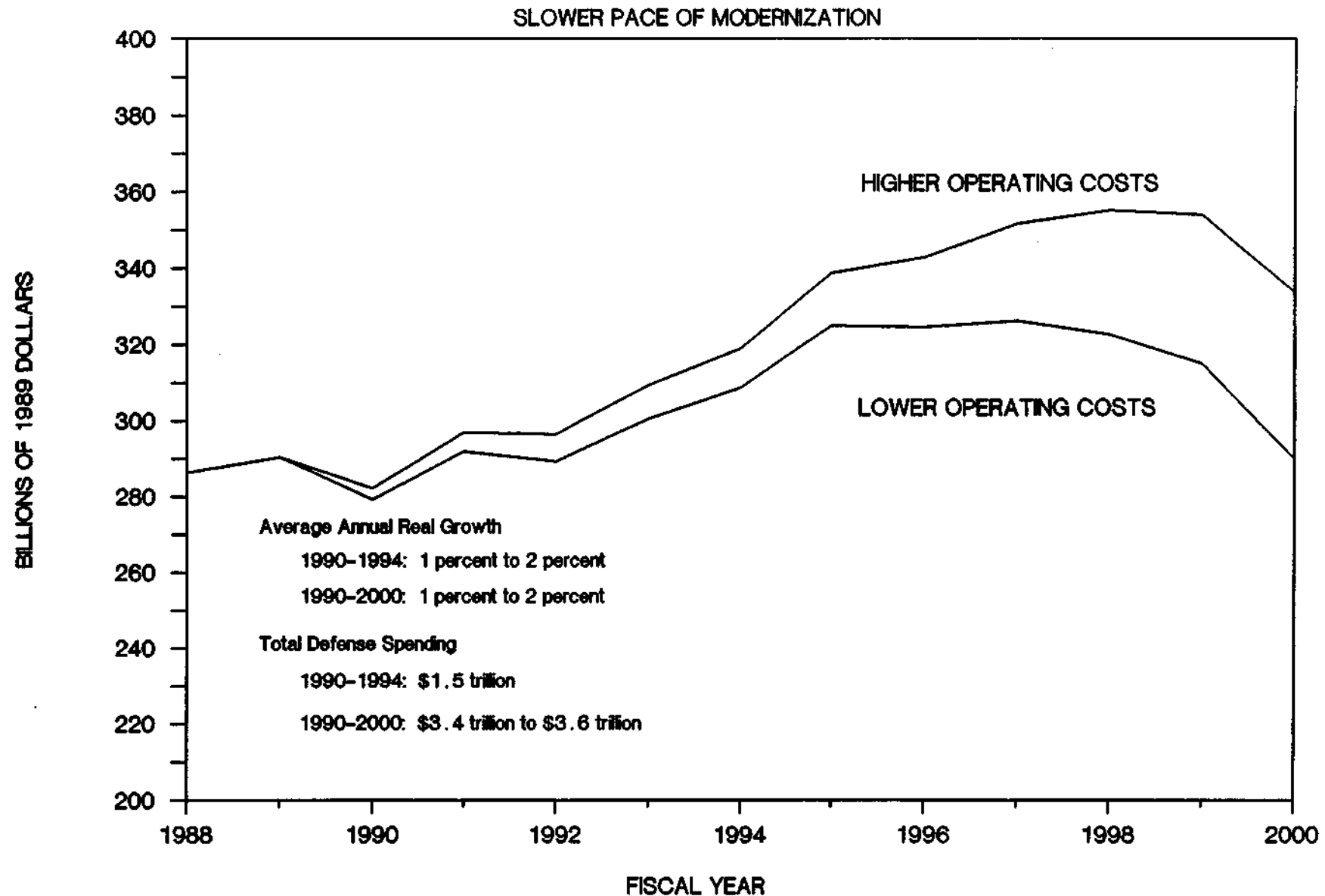
production. The costs of modernization could be reduced by canceling selected weapons. Alternatively, the United States could hold down costs by electing to modernize a smaller force or by maintaining lower operating tempos. Efficiencies in defense spending also might offset some future costs.

Figure 1. PROJECTED DEFENSE BUDGET



SOURCE: Congressional Budget Office based on Department of Defense data.

Figure 2. PROJECTED DEFENSE BUDGET



SOURCE: Congressional Budget Office based on Department of Defense data.

**TABLE 1. SELECTED CURRENT FORCES AND PLANS FOR
MODERNIZATION**

Forces	Equipment
Army	
18 Active Divisions	M1 Tank, Bradley Fighting Vehicle
10 Reserve Divisions	Apache Attack Helicopter
	New Light Attack/Reconnaissance Helicopter (LHX)
Navy	
580 Deployable Ships	Nimitz-Class Aircraft Carrier
15 Carrier Battle Groups	New Guided Missile Destroyer (DDG-51)
15 Carrier Air Wings	New Submarine (SSN-21)
(13 Active, 2 Reserve)	New Tactical Aircraft (ATA)
	New Tilt-Rotor Aircraft (V-22)
Air Force	
35 Tactical Fighter Wings	Stealth Strategic Bomber (B-2)
	New Tactical Fighter (ATF)
Strategic Defense Initiative	
n.a.	No Deployment
	Annual Real Growth of 3 Percent in Research Funds

SOURCE: Congressional Budget Office based on Department of Defense data.

NOTE: n.a. = not applicable.

TABLE 2. ASSUMPTIONS FOR SLOWING OR DEFERRING MAJOR
PROCUREMENT PROGRAMS

Program	Assumption
New Anti-tank Guided Missile (AAWSM)	Initial procurement in 1995 (rather than 1992)
New Guided Missile Destroyer (DDG 51)	Three (rather than six) per year
Nimitz-Class Aircraft Carrier (CVN)	Four (rather than six) by 2000
Stealth Strategic Bomber	Initial procurement in 1993 (rather than 1989)
New Tactical Fighter Aircraft (ATF)	Limited to 48 (rather than 72) per year
Strategic Airlifter (C-17)	Limited to 20 per year

SOURCE: Congressional Budget Office.